

In response to item 2 of the Office Action, the Abstract of the Disclosure has been amended. So, too, various portions of the disclosure have been amended per requirement by the examiner.

The examiner has rejected the pending claims 1-33 under 35 U.S.C. 103(a) as being unpatentable over Savage U.S. patent 6,026,372 in view of any one of the Cahlander et al. patents (4,922,435; 5,132,914 or 5,172,328). In view of the fact that Cahlander et al. U.S. patent 5,172,328 is the latest issued Cahlander patents and is a CIP and continuation of the earlier patents, discussion is to be focused only to the '328 patent.

The examiner argues that the Cahlander references "show a method for cooking food orders at peak and non-peak time periods using computer control command signals (e.g. columns 2-3 and claims 33-36 of Cahlander et al. U.S. patent 5,172,328)." Underline added.

As was noted in the previous amendment, the Savage system requires respective manual inputs by a cook to commence processing and termination of the processing of a food item. (Column 4, lines 23-27 and lines 56-59) The Savage system is succinctly described as a system that "instructs the cook to initiate a cooking process based upon a number of items on hand and currently being cooked in view of the number of items typically desired to have on hand a particular time of the day." (Column 5, lines 3-10) The purpose of the Savage system is to reduce "the responsibilities of the manager of predicting future needs based on particular present circumstances." (Column 5, lines 10-13)

Cahlander, on the other hand, is directed to a computerized robotic cooking cell that operates under computer control. The cooking cell can compensate for the variations in the product volume and mix that occurs throughout the day. (Column 3, lines 18-20) According to Cahlander, the computer that controls the cooking cell would

generate a schedule of planning activities based on its memory files for the overall day in general terms and a more detailed plan for the short term periods. And as the day progresses, the computer would then compare the planned activities to the actual activities input from the point of sales devices so that, if the planned activities differ significantly from the actual activities, then either one or both of the overall plan and the short term plan may be modified. (Column 12, lines 36-66)

There are thus no teachings or suggestions in either Savage or Cahlander of displaying the quantities of each of the articles predicted to be prepared at a given time period at a peak time, and the displaying of the articles of the input items at non-peak times.

There clearly is no need for the Cahlander robotic system to display anything to the human operator, since everything is automated, subject to the view operations to be performed by the human operator. (Column 2, lines 58-64)

In relying on Cahlander et al., the examiner specifically pointed out claims 33-36 of the '328 patent. Yet as is well established, it is what is disclosed in the specification, and not the claims, that should be relied upon as reference. See Mineral Separation North American Corp., v. Magma Copper Co., 280 US 400, 402, 50 SC 185, 186, 74 Led. 511, 512, 4 USPQ 148, 149 (S. Ct. 1930). See also In Re Benno, 226 USPQ 683, 686-687 (CAFC 1985) and S3 Inc. v. nVIDIA Corp., 259 F. 3d. 1364, 59 USPQ 2d 1745 (Fed. Cir. 2001). The reliance of the claims of Cahlander for rejecting the pending claims as being obvious is therefore simply wrong. Furthermore, claims 33-36 of Cahlander in question do not come close to what is claimed.

The examiner furthermore states: "To provide a method for displaying peak and non-peak order of food and computer controlled command signals for the food prediction system of Savage would have been obvious to one of ordinary skill in the art in view of

Cahlander et al. ... To do so would provide the well known option of using computer control command signals used in food systems."

Yet such argument has been held repeatedly to be without merit by the courts, which require that specific motivation provided in the references be spelled out by the examiner. Indeed, in In re Sang Su Lee 277 F.3d 1338, 1342-1343 (Fed. Cir. 2002), the CAFC held that "[w]hen rejecting a claim for obviousness, the PTO must articulate reasons for its decision. In particular, the PTO must show there is teaching, motivation, or suggestion of a motivation to combine references relied on as evidence of obviousness." See the succinct quoted synopsis of In re Sang Su Lee by the CAFC in In re David D. Muresan and David Muresan, 02-1041 (Fed. Cir. April 3, 2002).

In view of the foregoing, applicants respectfully submit that the instant invention is patentably distinguishable over the prior art. Accordingly, reconsideration of the application and allowance of the pending claims at an early date are earnestly solicited.

Respectfully submitted,



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**VERSION TO SHOW MARKINGS TO SHOW CHANGES MADE**

**Attachment Specification Portions Pursuant to 37 C.F.R. 1.121(b)(1)(iii)**

Please amend the specification as follows:

Page 5, the third full paragraph:

According to the present invention there is provided a first method of processing customer's orders including the steps of (a) storing setting data for every article; (b) inputting ordered articles and storing order data of the ordered articles; (c) predicting quantities of the articles to be prepared in accordance with the stored order data in response to a command signal; and (d) displaying the quantities every the articles in accordance with the setting data in response to the command signal.

Page 12, last paragraph bridging to page 13:

In the method of processing customer's order, it is sufficient to independently display a set[s] of order[s] for every customer when it is in a slow condition, that is, there are a small number of customers at the restaurant. However, when it is a peak time zone, that is, there are many customers in the restaurant, if articles are prepared for every customer, the efficiency is relatively low because the same articles are prepared independently. On the other hand, if a cook tried to combine plural orders to prepare the same articles, this is a load on the cook to know how many articles are to be prepared. Moreover, if articles have been previously prepared with forecast, there is the possibility that cool articles may be served. Accordingly, in this invention, the displayed image is changed between a slow condition and a peak time zone condition. At a peak time zone or in a peak time condition, the predicted number of articles per unit time interval is calculated and displayed.

Page 15, last paragraph bridging to page 16:

In step 53, the CPU 11 counts the number of orders of each article[s] of which peak time zone control code is "one" for previous thirty minutes to calculate the number of articles to be prepared every five minutes and every ten minutes for prediction and displays the number of the articles to be prepared every five minutes and every ten

minutes as shown in Fig. 4. In step 55, if all articles in the set of order have been processed, processing ends or returns to a not-shown main routine. In step 55, if all articles in the set of order have not been processed, processing returns to step 51 to process the following ordered article.

Page 17, second paragraph:

As mentioned, in the method of processing customer's orders, there are steps: (a) inputting and storing setting data for every article in the setting memory 14; (b) inputting and storing order data of ordered articles in the data memory 13; (c) predicting quantities of the ordered articles in response to a command signal generated in step 53 from the data of sold articles from the data memory 13 for last thirty minutes; and displaying the quantities for every the article[s] in accordance with the setting data in response to the command signal in step 53. Moreover, the clock circuit 18 measures the present time; and the CPU 11 judges whether the present time is within a peak time zone to generate the command signal.

Page 19, first and second full paragraphs:

In step 75, the CPU 11 counts the number of orders of each article[s of] for which peak time zone control code is "one", for previous thirty minutes to calculate the number of articles to be prepared every five minutes and every ten minutes for prediction and displays the number of the articles to be prepared every five minutes and every ten minutes as shown in Fig. 4. In step 77, if all articles in the set of order have been processed, processing ends or returns to a not-shown main routine. In step 77, if all articles in the set of order have not been processed, processing returns to step 71 to process the following ordered article.

In step 76, that is, at the slow time zone, as shown 20 in Fig. 3, the CPU 11 displays the names of ordered articles and the number of ordered articles for every set of order in order of time. In step 77, if all articles in the set of order have been processed, processing ends or returns to the not-shown main routine.

Page 22, second full paragraph:

In step 94, that is, in the slow time zone, as shown in Fig. 3, the CPU 11 displays the names of ordered articles and the number of ordered articles for every set of order in order of time. Then, in step 95, if all articles in the set of orders have been processed, processing ends or returns to the not-shown main routine.

Page 23, first full paragraph:

In the method according to the third embodiment, there are steps of: (a) inputting and storing setting data for every article; (b) inputting and storing order data of ordered articles; (c) predicting quantities of the ordered articles in response to a command signal; (d) displaying the quantities every the articles in accordance with the setting data in response to the command signal and (e) providing a monitor switch responsive to an operator for generating the command signal.

Page 25, last paragraph bridging to page 26:

As mentioned above, in the customer's order processing apparatus according to the fourth embodiment, the peak time zone control codes indicative of either [of] displaying or not displaying the predicted [the] number of articles to be prepared or to be sold in the article setting table. When an operator judges that it is in the peak time condition, the operator can set the peak time display operation with the rotary switch 20, so that the predicted number of articles are displayed instead the display image representing respective sets of orders. Therefore, it becomes easy to prepare articles and the efficiency of cooking can be increased. Moreover, at the slow time zone, it is possible to reduce a loss by previously preparing.

Page 26, first full paragraph:

In the method according to the fourth embodiment, there are steps of: (a) inputting and storing setting data for every article; (b) inputting and storing order data of ordered articles; (c) predicting quantities of the ordered articles in response to a command signal; (d) displaying the quantities of every one of the articles in accordance

with the setting data in response to the command signal and (e) providing the rotary switch 20 responsive to the operator for generating the command signal.

Page 27, last paragraph bridging to page 28:

In step 131, the CPU 11 counts the number of customers, that is, increments the number of customers in response to the total key and decrements the number of customers in response to the served key 83. In the following step 132, the CPU 11 checks whether thirty minutes has passed. If no, processing returns to step 131. If yes, processing proceeds to the step 133, where the CPU 11 checks whether the number of customers exceeds the reference number 121 of customers in step 133. If the number of customers exceeds the reference number (R) 121 of customers, processing proceeds to step 134 where the CPU 11 checks whether a flag indicative of a peak time zone has been set. If the flag has been set, processing returns to step 131. If no, processing proceeds to step 135 where the CPU 11 reads and sets the present time as the peak time zone start time in the table 122 and sets the flag.

Page 28, first full paragraph:

In step 133, if the number of customers does not exceed the reference number (R) 121 of customers, processing proceeds to step 136 where the CPU 11 checks the flag. If the flag has been set, processing proceeds to step 137 and reads and sets the present time as the peak time zone end time in the table 122 and processing ends. As [the] a result, the peak time zone start time and end time are stored in the table 122 which represent the predicted peak time zone. The CPU 11 uses the peak time zone start time and end time [as] similar [as] to the second embodiment, wherein the peak time zone start time 61 and the peak time zone end time 62 shown in Fig. 6 are replaced with the predicted peak time zone 122 shown in Fig. 12.

Page 31, first full paragraph:

In step 159, that is, at the slow time zone, as shown in Fig. 3, the CPU 11 displays the names of ordered articles and the number of ordered articles for every set

of order in order of time. In step 160, if all articles in the set of order have been processed, processing ends or returns to the not-shown main routine.

Page 40, first full paragraph:

In step 223, the CPU 11 counts the number of orders of each article[s of] for which peak time zone control code is "one" for previous thirty minutes to calculate the number of articles to be prepared every five minutes and every ten minutes for prediction and displays the number of the articles to be prepared every five minutes and every ten minutes as shown in Fig. 4. In step 225, if all articles in the set of order have been processed, processing ends or returns to a not-shown main routine. In step 225, if all articles in the set of order have not been processed, processing returns to step 221 to process the following ordered article.

Page 52, abstract of the disclosure:

#### ABSTRACT OF THE DISCLOSURE

In a customer's order processing apparatus and method, the CPU stores setting data for every article, inputs and stores order data of ordered articles, predicts quantities of the ordered articles in response to a command signal, and displays the quantities every the articles in accordance with the setting data in response to the command signal, so that at the slow time zone, each set of orders are displayed independently in order of time and at the peak time zone, the target number of articles to be prepared are displayed. The command signal for effecting the peak time condition display is generated according to the present time and the peak time zone start time and end time which were inputted or stored. Moreover, the peak time zone start time and end time may be detected according to the number of customers. Moreover, the command signal may be further generated in response to a key switch or a rotary switch. The peak time zone data may be switched between weekdays and holidays. The peak time condition may be judged according to the number of customers. The command signal may be transmitted from the cash register and received by a video controller to effect the peak



- time zone display operation. The command signal may be generated in accordance with the number of detected customers or the number of the pending orders.